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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/528,553	03/20/2000	Ulf Gustafson	46586-2	4954

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COATS & BENNETT, PLLC  
P O BOX 5  
RALEIGH, NC 27602

EXAMINER
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HYUN, SOON D

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/528,553

Applicant(s)

GUSTAFSON ET AL.

Examiner

Soon D. Hyun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-57 is/are allowed.
- 6) ☒ Claim(s) 12-20, 22-34, 37-40, 42-51 and 58-60 is/are rejected.
- 7) ☒ Claim(s) 21, 35, 36 and 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 12-18, 23-25, 27-32, 34, 58-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al (U.S. Patent No. 6,487,406).

Regarding claim 12, Chang et al (Chang) discloses an apparatus in a telecommunication network (FIG. 2) containing a MSC (12) comprising:

an access control server (a gateway router GR 32 in FIG. 2 including HA functions combined and implemented in the GR, col. 9, lines 14-16) connected to one base station (16), the base station being in wireless communication with at least one mobile station (MS 18), the base station having a circuit-switched connection to the MSC, the access control server includes a signaling interface (not shown, but the GR with HA functions inherently includes a signaling interface performing signaling shown on FIG. 4 and 5) to manage packetized communications within the communication network independent of the MSC, such that the MSC facilitates only circuit-switched communications within the telecommunication network (col. 4, lines 1-19).

Regarding claims 13, and 58-60, Chang et al (Chang) discloses a method for providing packetized communications within a telecommunication network (FIG. 2) having a MSC (12) comprising:

transceiving a packetized communication between at least one mobile station (MS 18) and a base station (16);

managing, by an access control node (a gateway router GR 32 in FIG. 2 including HA functions combined and implemented in the GR, col. 9, lines 14-16) within the telecommunication network, the packetized communication, the access control node having a signaling interface (not shown, but the GR with HA and FA functions inherently includes a signaling interface performing signaling shown on FIG. 4 and 5) and being connected to the base station to transceive the packetized communication by passing the MSC (col. 4, lines 1-19).

Regarding claim 14, Chang further discloses that the at least mobile station comprises a mixture of legacy mobile stations and all packetized mobile stations (col. 4, lines 1-19 and FIG. 5).

Regarding claim 15, Chang further discloses a Packet Authentication Center (PAC) (FA, 42) in communication with the access control server, see FA-HA (in the GR) communications in FIG. 5.

Regarding claims 16, 23, 27, and 31, Chang further discloses that the PAC (FA) contains subscriber profiles (mobile IP addresses for subscribers) for authentication and authorization of packet data (a binding acknowledge), see col. 6, line 51-col. 7, line 27. The access control center (ACS) of claim 27 is equivalent to the access control node.

Regarding claim 17, Chang further discloses that the apparatus comprises a home location register (HRL) 22.

Regarding claim 18, Chang further discloses that the communication network comprises a packet data service network (Internet 34) in communication with the base station (FIG. 2)

Regarding claims 24, 29, 30, and 34, Chang further discloses that the access control node (the GR 32 with HA functions) is responsible for bear control and mobility management with packet services (col. 9, lines 1-40).

Regarding claim 25, Chang further discloses that the MSC maintains control and handling procedures for circuit-switched communications (col. 4, lines 1-19).

Regarding claims 28 and 32, Chang further discloses that the PAC and ACS communicate over IP based communication link (FIG. 6).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19, 20 22, 26, 37-40, and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (U.S. Patent No. 6,487,406).

Regarding claims 19 and 20, Chang teach that the HA in the GR has functions of authorization and authentication (col. 7, lines 29-46), but does not explicitly teach that

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the HA performs an account function. It will be apparent to those of skill in the art that the HRL performs an account function for the circuit-switched communications and the HA performs for the packet switched network analogous functions to the HRL when the mobile station is connected to the packet switched network. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate an account function into the HA in communication with the access control server.

Regarding claim 22, Chang further discloses that the communication network comprises a packet data service network (Internet 34) in communication with the base station via a packet control function (FIG. 2).

Regarding claims 26, 37, and 42, Chang does not explicitly that the communication network comprises a CDMA wireless telecommunication network. It will be apparent to those of skill in the art that CDMA, FDMA, and TDMA are protocols used for a wireless communication network. Therefore, it would have been obvious to one having ordinary skill in the art to use one of the protocols for Chang as long as no unexpected results can be seen from the use of the CDMA.

Regarding claim 33, Chang does not teach VOIP, but it would have been obvious to one having ordinary skill in the art to incorporate VOIP into Chang to transmit voice packets via the Internet to utilize a communication channel more efficiently. It is an Official Notice that a mobile communication combined with the internet using VOIP method is well known in the art.

Regarding claim 38, refer to the discussion for the claims 25 and 37.

Regarding claim 39, Chang further discloses that the circuit-switched communications with the MSC comprises voice only communications (col. 4 lines 1-19).

Regarding claim 40, refer to the discussion for the claim 17.

Regarding claim 43, refer to the discussion for the claim 28.

Regarding claim 44, refer to the discussion for the claim 15.

Regarding claim 45, refer to the discussion for the claim 16.

Regarding claim 46, refer to the discussion for the claim 18.

Regarding claims 47 and 49, refer to the discussion for the claim 19.

Regarding claim 48, refer to the discussion for the claim 22.

Regarding claim 50, refer to the discussion for the claim 23.

Regarding claim 51, refer to the discussion for the claim 24.

#### ***Allowable Subject Matter***

5. Claims 52-57 are allowed.
6. Claims 21, 35, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

7. Applicant's arguments filed 11/17/04 have been fully considered but they are not persuasive.

Regarding claims 12, 13, 27, 31, and 58, Applicant argues (Remarks page 13, lines 17-18 and lines 25-26) that “the disclosed gateway router does not include a signaling interface to manage packetized communications”. Examiner disagrees. As discussed in the claim rejection, Chang clearly teaches that the GR (gateway router) with HA functions inherently includes a signaling interface to perform signaling shown on FIG. 4 and 5 to manage packetized communications.

Therefore, Examiner believes that the claim rejection is proper.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D. Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Hyun  
05/09/2006



DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600